

defined distributions. The model was most sensitive to change in the risk ratio of relapse and the proportion of patients changing medication. PP dominated OP in 99% of cases in QALYs gained and in 92% of cases in relapses avoided. **CONCLUSIONS:** This cost-effectiveness analysis indicates that paliperidone palmitate has both economic (reduced costs) and clinical advantages (more QALYs, fewer relapses) compared with olanzapine pamoate in the long-term treatment of schizophrenia in Sweden.

PMH3

COST-EFFECTIVENESS OF PALIPERIDONE PALMITATE FOR THE TREATMENT OF SCHIZOPHRENIA IN MÉXICO

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OBJECTIVES: Perform a cost-effectiveness analysis of paliperidone palmitate, for the treatment of patients with schizophrenia in Mexico, from the perspective of public health care providers. **METHODS:** A Markov model with monthly cycles was developed based on the natural history of disease, to simulate cohorts of patients treated with paliperidone palmitate (PP), risperidone long-acting injectable (RIS) or oral olanzapine (OLZ), over a ten year horizon. The model captured clinical and cost parameters including adherence levels, relapse risks, treatment switch reasons, adverse events and direct medical care costs. Deterministic and probabilistic sensitivity analyses were conducted to assess the robustness of the model. **RESULTS:** Compared with RIS, PP resulted more effective and less costly, while when compared with OLZ, PP was more costly but more effective with an incremental cost-effectiveness ratio of US\$ 980 per relapse avoided. When plotting an acceptability curve, PP showed a 0.90 probability of being cost-effective if a decision maker is willing to pay US\$ 3775 at present value to avoid an additional relapse over a 10 year horizon. There was also a 0.32 probability of PP being considered cost-saving. Both probability results were derived from the comparison with OLZ. **CONCLUSIONS:** Since it is possible to avoid more relapses at a reasonable cost when compared with OLZ, PP represents good value-for-money for Mexican healthcare providers. On the other hand, PP is a dominant treatment alternative over RIS.

PMH4

ECONOMIC ASSESSMENT OF MAJOR DEPRESSIVE DISORDER TREATMENT UNDER DIFFERENT THERAPEUTIC CLASSES AT ISSSTE

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OBJECTIVES: The objective of the present study is to determine the cost-effectiveness associated with three therapeutic classes for treating major depressive disorder (MDD) from the public health care payer perspective in Mexico. **METHODS:** To evaluate health and cost outcomes, a previously published decision model was adapted in order to reflect the usual treatment practice of MDD at the Institute for Social Security and Services for State Workers in Mexico (ISSSTE) during a 3-months time horizon. The three therapeutic classes included in the present analysis are: Selective Serotonin Reuptake Inhibitors (SSRI), Tricyclics (TCA) and Serotonin-Norepinephrine Reuptake Inhibitors (SNRI). Only direct medical costs were considered either generics or branded antidepressants with patent protection. All costs are presented in 2010 US dollars (Exchange Rate 1 US:12.50 MXN pesos). **RESULTS:** Within the 3 therapeutic classes assessed, the expected value for one patient with each three options was distributed as follows: \$5 001, \$4 215 \$4 078 for group SSRI, TCA, and SNRI, respectively. The alternative with a greater expected remission rate was the SNRI class. For every thousand patients treated with SNRI, TCA, and SSRI, 725, 718, and 665 patients are expected to accomplish remission. For each thousand patients treated with SNRI instead of TCA, there will be \$ 68,272 cost savings over a period of 3 months. Likewise, when compared against SSRI, the savings generated by SNRI is more than \$ 367 437 for each thousand treated patients. **CONCLUSIONS:** The results of the present analysis suggest that the SNRI as a therapeutic class in the treatment of MDD represent a dominant strategy.

PMH5

ANÁLISIS DE COSTO EFECTIVIDAD DEL MANEJO FARMACOLÓGICO DE LA ESQUIZOFRENIA RECURRENTE EN PERÚ AJUSTADO POR LA ADHERENCIA AL TRATAMIENTO

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OBJECTIVOS: Comparar los resultados de costo-efectividad del tratamiento de la esquizofrenia en adultos entre los antipsicóticos orales atípicos (APOA) vs. antipsicóticos de depósito convencionales (DEPOT) vs. risperidona de acción prolongada inyectable (RAPI) entre escenarios según adherencia. **METODOLOGÍAS:** Se desarrolla un modelo en Excel con variables de uso y frecuencia de los medicamentos y recursos hospitalarios, los eventos adversos más relevantes y el subsidio por incapacidad entre las alternativas disponibles para el tratamiento de la esquizofrenia. El modelo contempla switch de medicación por risperidona de acción prolongada cuando ha iniciado con antipsicóticos de depósito convencionales u orales atípicos y haloperidol o flufenazina para el caso de risperidona de acción prolongada inyectable. Horizonte temporal: dos años (un año para cada escenario), Perspectiva del tercero pagador. Indicadores de efectividad: días libres de crisis y días evitados de hospitalización. **RESULTADOS:** El modelo proyecta un porcentaje de adherencia de 89.6% para RAPI; 79.6% para DEPOT; y 69.5% para APOA. El incremento de efectividad de RAPI teniendo en cuenta los dos escenarios comparado con la opción menos costosa (risperidona oral) es de 65 días libres de crisis y 15 días libres de hospitalización con un ICER en el primer caso de \$65.47 y en el segundo caso de ICER de \$261.67 en dos años. **CONCLUSIONES:** Risperidona de acción prolongada como primer medicamento o como switch en esquizofrenia recurrente teniendo en

cuenta un primer año de mala adherencia y un segundo año con mejoría de la adherencia es una alternativa que ahorra costos en recursos hospitalarios y costo efectiva con un umbral a pagar aceptable comparándolo con el costo de un día de hospitalización (\$300). El análisis de sensibilidad muestra robustez después de tres días en promedio de hospitalización en caso de recaída. (1 Dólar Americano: 2.84 Nuevos Soles Peruanos).

Muscular-Skeletal Disorders – Clinical Outcomes Studies

PMS1

META-ANÁLISIS DE LA EFECTIVIDAD Y SEGURIDAD DEL USO DE CELECOXIB EN EL MANEJO DEL DOLOR CRÓNICO VS OTROS COX-2 EN PACIENTES CON OSTEARTRITIS O ARTRITIS REUMATOIDE

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OBJECTIVOS: Los inhibidores de la ciclooxigenasa-2 (COX-2) constituyen una alternativa para tratar el dolor asociado a artritis reumatoide u osteoartritis. El objetivo de esta investigación fue identificar las diferencias en efectividad y seguridad de celecoxib vs otros inhibidores de la COX-2 al tratar el dolor en pacientes con osteoartritis o artritis reumatoide. **METODOLOGÍAS:** Se realizó una búsqueda de literatura publicada de enero 2000 a diciembre 2010. Se incluyeron ensayos aleatorizados, doble ciegos y placebo-controlados, que especifican la evaluación de la intensidad del dolor mediante escala visual analógica (EVA) e incidencia de eventos adversos (EA) gastrointestinales y cardiovasculares (hipertensión, edema y cardiopatía congestiva), en pacientes con clase funcional I-III, con dolor ≥ 40 EVA y 3 meses previos con sintomatología. Se excluyeron aquellos que investigaron dosis de inhibidores de la COX-2 diferentes a las terapéuticas (Celecoxib 200mg/día, Etoricoxib 30-90mg/día y Lumiracoxib 100-200mg/día). Para la cuantificación del efecto de los inhibidores de la COX-2, se definió la diferencia media en la reducción en la calificación de EVA con respecto a placebo y se evaluó mediante análisis de varianza. La razón de momios para estimar el incremento en riesgo de presentar EA's, se estimó mediante la prueba Mantel-Haenszel. Se consideró el modelo de efectos aleatorios y pruebas de heterogeneidad. **RESULTADOS:** La reducción absoluta en la escala del dolor a 12 semanas con respecto a placebo fue 14.18% IC95% [10.48-17.87] con Celecoxib ($P < 0.00001$); 12.70% IC95% [7.67-17.73] con Etoricoxib ($P < 0.00001$) y 9.47% IC95% [7.17-11.77] con Lumiracoxib ($P < 0.00001$). Celecoxib redujo el dolor crónico en 4.71% IC95% [0.36,9.06] ($P = 0.03$) respecto a Lumiracoxib. La diferencia con Etoricoxib no fue significativa ($P = 0.64$). La diferencia en la incidencia de EA's entre los inhibidores de la COX-2 y placebo no fue significativa. **CONCLUSIONES:** Celecoxib constituye una alternativa farmacológica segura para el manejo del dolor crónico asociado a osteoartritis o artritis reumatoide y ofrece mayor reducción del dolor vs Lumiracoxib.

PMS2

OSTEOPOROSIS MEDICATION MIGHT HELP REDUCE THE INCIDENCE OF SECOND HIP FRACTURES?

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OBJECTIVES: The aim of the study is to evaluate, that the pharmacologic treatment for osteoporosis after primary hip fracture can reduce the risk of subsequent femoral neck fracture in patients aged over 60 years? **METHODS:** In this retrospective study the data derive from the financial database of the Hungarian National Health Insurance Fund Administration. The study includes patients over 60 years following primary treatment of femoral neck fracture (S7200) discharged from inpatient care institutions in 2000. Pathologic hip fractures, fractures that emerged from high-energy trauma, fractures that happened in hospitals, and patients who died within 1/2 years after primary hip fracture were excluded from the analysis. The follow up period was 8 years. We evaluated data according to sex, age, type of living place, type of hospital treated the primary fracture, type of primary femoral neck fracture, absence or presence of accompanying diseases, type of surgical intervention for primary fracture, and antiosteoporotic pharmacologic treatment after primary fracture. The effects of prognostic factors were evaluated by Cox proportional hazard regression analysis (HR, 95 % CI, p) **RESULTS:** The 2778 patients were observed for 13,488.92 person-years. During the observation period 320 second hip fracture (11.5 %) were identified, giving an overall incidence of 0.024 per person-year. The significant predictors (0.05>p) are presented: Gender: female/male HR: 1.5289; Age: 80-89y/60-69y HR:1.4910; Residence: capital/village HR:1.4980; Type of surgical intervention: arthroplasty/osteosynthesis HR:1.4136; Osteoporosis medication: duration<2years/none HR:0.5100, duration>2 years/none HR:0.5261. The references is marked with underline. **CONCLUSIONS:** The risk of second hip fracture was the highest in female, in older age-group, in patient after arthroplasty, in patient with capital residence and in patient without pharmacologic treatment for osteoporosis. In addition the osteoporosis medication can reduce the risk of subsequent femoral neck fracture.

Muscular-Skeletal Disorders – Cost Studies

PMS3

IMPACTO ECONOMICO DE LA OSTEOPOROSIS Y DE LAS FRACTURAS POR FRAGILIDAD EN EL INSTITUTO MEXICANO DEL SEGURO SOCIAL

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